Georgetown Water Department
Board of Water Commissioners Meeting

WTP Floor Plan Design Update

Meeting Minutes

Meeting Date: September 24, 2024

Meeting Time: 11:00 AM

Meeting Location: Virtual

Join Zoom Meeting

https://us06web.zoom.us/j/84340486684?pwd=dHYZLCNnniTBAJN9d8x1WHRsnmYpnd.1

Meeting ID: 843 4048 6684

Passcode: 792504

Attendance:

Board of Water Commissioners (BWC/GWD): Jeff McClure (Chairman), Nick Lawler, Steve King

Georgetown Water Department (GWD) Staff: Marlene Ladderbush (Utility Director), Stacie Melchin (Office Manager)

Tighe and Bond Engineers: Thomas Mahanna, Louis Soracco

Minutes keeper: Stacie Melchin

Public Input

No attendees

Preliminary Matters:

Meeting called to order by Jeff McClure 11:03 am

WTP Upgrade Floor Plan Workshop

The meeting was comprised of discussion points between the Board of Water Commissioners Jeff McClure, Nick Lawler, Steve King, and Utility Director Marlene Ladderbush (**BWC/GWD**), and the Tighe and Bond Engineers Thomas Mahanna and Louis Soracco (**T&B**) regarding the WTP upgrade floor plan. The following outline summarizes the questions, concerns, and responses during the meeting.

BWC/GWD

The BWC/GWD emphasized that the major goal is to ensure the floor plan design stays within the Town Meeting Appropriation. The BWC/GWD asserted ownership on Tighe and Bond to guarantee that the design stays within budget and the necessity to compress the layout to the smallest square footage possible to ensure this goal.

T&B

Tighe and Bond recognizes the importance of remaining within the appropriated budget, but due to the unpredictability of the bid results, T&B are unable to commit to a guarantee. However, T&B believes that because the project is not an SRF project that this factor will help for the bid to go out at a more convenient timeline, offsetting from SRF bids in turn keeping costs down. T&B also understands the importance of maintaining the smallest footprint in respect to the layout of the floor plan.

BWC/GWD

The BWC/GWD inquired if the relocation of the pumps was the only amendment to minimize the square footage.

T&B

Tighe and Bond stated the pumps' locations were placed along the opposite wall because of the grading restrictions on the original wall side. T&B also noted that if the pumps were at the back of the building, it may be difficult for vehicles to access due to the current grading.

BWC/GWD

The BWC/GWD discussed the filter locations and expressed that possible roof adjustments could be a better solution than a 12ft garage door regarding replacement or removal of the filters.

T&B

T&B responded that they do not expect to remove filters but can shore roofing trussells to enable removal access through the roof.

BWC/GWD

BWC/GWD asked if the chemical room can be downsized since only the KOH is to be housed in the new building and whether aeration could control the pH solely or enough to reduce KOH bulk storage further.

T&B

T&B stated that they would investigate the amount of air needed for biological filtration by referring to the pilot results and to better quantify the maximum amount of bulk storage for KOH to be housed in the new chemical room.

BWC/GWD

The BWC/GWD discussed further that dependent upon the KOH needs, it could not only minimize the KOH storage area but also negate the need for a true room and possibly only a knee wall.

T&B

T&B understood the advantage of the board and Marlene's point and will investigate to present the findings at the next meeting.

BWC/GWD

The BWC/GWD underscored another space saving suggestion by spinning the design to the right which would remove another door while remaining within regulations.

T&B

T&B made note of the design redirection idea and proceeded with a discussion of egress doors and what would be the best fit for the needs of the workers concerning one door in the new building and second door in common corridor for the original plant building.

BWC/GWD

The BWC/GWD explained the current backwash needs as well as the projected biological backwash needs in terms of backwash water storage and asked for reconfirmation of the clearwell's sizing and location.

T&B

T&B conveyed that the chlorinated storage would be reduced to facilitate the backwash of one full train of existing filters. T&B confirmed the agreed upon size and location of the clearwell towards the soccer fields.

BWC/GWD

The BWC/GWD inquired if different dimension combinations were explored for the pump layout in order to create more efficient use of space. Also, T&B was reminded that they were asked for a life cycle analysis of the roof and to please provide this information before the next meeting.

T&B

T&B stated that they tried different dimension combinations concerning the pump layout, however no significant space was saved.

BWC/GWD

Concerning the need to regenerate the existing carbon filter contents, the BWC/GWD asked how often the carbon will need to be replaced along with how long a replacement of media would take and the replacement frequency. Also, how can the plant continue to run while the GAC is offline. The BWC/GWD also inquired if there are any pH concerns of washing new carbon.

T&B

T&B approximated that replacement would be needed within a one to five-year period. T&B did not have any input regarding the amount of backwashing needed, time to bring pH back to normal of the virgin/regenerated carbon, or instruction on running the plant while the GAC is offline.

BWC/GWD

The BWC/GWD presented the idea of the 12ft garage door be replaced by a knockout with double doors option. BWC/GWD also inquired about the aeration motor and if it could be located outside to eliminate space and noise pollution within the building.

T&B

T&B stated that the aeration motor can be placed outside since it will be used minimally, however outside exposure will cause more external wear and tear on the unit.

BWC/GWD

BWC/GWD asked if the pumps are moved, could they be placed closer together and share a single concrete pad for the purpose of saving space. Also, if the septic system would need to be moved according to the current design plan.

T&B

T&B stated that they will take into consideration the pump locations and pads consolidation idea. Regarding the septic system, some piping may need to be moved, but the size will suffice and are anticipating that there will be no extra work necessary since there will be no additional bathroom.

BWC/GWD

The BWC/GWD inquired if a 2-inch domestic line is necessary even without the addition of a bathroom and if the vertical filters require a catwalk to access the top hatches.

T&B

T&B confirmed that a 2-inch domestic line is needed noting for potential eye washes. Tighe and Bond discussed the possibility of a catwalk permanent structure, however it is more common to use a removable mobile ladder or forklift/scissors jack.

BWC/GWD

The BWC/GWD asked if Tighe and Bond have considered a PFAS conversion plan including an outline of steps to follow if the GWD has a future PFAS concern.

T&B

Tighe and Bond confirmed that they have put forward consideration regarding a PFAS conversion plan.

BWC/GWD

The BWC/GWD asked T&B if an egress and code review been brought to completion and wanted assurance that additional bathrooms were not needed according to the current regulations.

T&B

Tighe and Bond confirmed that a review has been completed and determined that no additional bathrooms are required due to proximity of the existing plant building.

BWC/GWD

BWC/ GWD reiterated whether KOH was the only chemical to be located in the new building.

T&B

Tighe and Bond responded affirmative concerning the location of the KOH. Tighe and Bond initiated a discussion about meeting the new energy code and proposed the idea of using solar panels for fifteen points.

BWC/GWD

The BWC/GWD could not immediately confirm if Georgetown bylaws would allow the use of solar panels for the plant, however the consensus was that method of energy is not efficient for the WTP. The board requested Marlene to further investigate through GLED if solar panels are a viable option.

T&B

Tighe and Bond asked if the piping gallery could be housed in the new (heated) corridor ensuring use of the appropriate sheathing.

BWC/GWD

The BWC /GWD questioned T&B regarding what type of safety measures would be put in place with overhead piping which may create issues due to condensation, HVAC concerns, and options for insulating pipes to minimize sweating during operation.

T&B

T&B stated that above ground piping will be a sizable cost savings. T&B also added that other safety measures such as using waterproof insulation will aid in deterring condensation and reenforced the fact that the pipes will be in a heated corridor to avoid other weather issues.

BWC/GWD

The BWC /GWD concluded the workshop meeting with a request for an updated new design floor plan to be submitted by October 15, 2024.

T&B

Tighe and Bond agreed to have an updated new design floor plan for presentation by the week of October 15, 2024.

Motion to adjourn meeting at 11:54am moved by Nick Lawler

Seconded by Steve King

All in Favor

Vote 3-0